Instruction Manual

Rio 300

www.juwel-aquarium.com

Introduction

Thank you for choosing a JUWEL Aquarium product.

Our products represent over 40 years experience in the manufacturing of aquariums and their acessories applying most modern production techniques bringing together the JUWEL Aquarium system, which is both easy to use and simple to maintain.

Important:
Please read this instruction manual carefully and completely to make sure you have received all components before setting up the aquarium.

Please observe the safety instructions and maintenance guidelines given in this manual.

This instruction manual has been carefully prepared to provide you with accurate and complete information. All efforts have been made to ensure that the information given is correct. However, we cannot accept responsibility for printing or other errors. Technical details are always approximate and are not warranted characteristics and may be subject to change without notice.

Always unplug all immersed electrical equipment from mains before placing your hands into the water.

Important:
The use of additional air stones or air lines is not necessary with the JUWEL Aquariums. If an air stone is used, this should always be placed in the middle of the aquarium. Capillary leaks resulting from the use of these items will not be accepted as a fault with the aquarium.

Do not transport or move your aquarium while still containing water or sand.

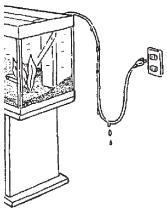
Always take care not to damage the seals while maintaining your aquarium.

Do not use toxic substances to clean your aquarium.

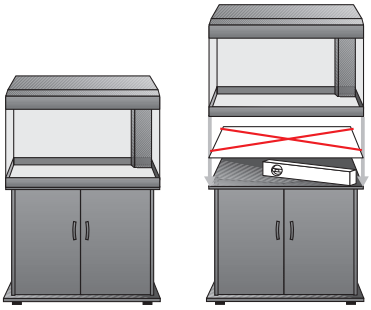
Safety instructions:
This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

Operation with the RC circuit breaker only, max. 30mA.

The power plugs of the electrical devices must not become moist. Connect the power plugs to the power supply at such a height that the connection cable forms a loop which would enable the water to drip down.



Setting up the Aquarium



We have produced your JUWEL Aquarium with the utmost care using most advanced production techniques. Extra strong packaging has been used to prevent damage to the aquarium. Please note however, that your aquarium has been transported and handled several times prior to reaching its final destination. We recommend therefore, that you test the aquarium for leaks in a suitable area (e.g. garage), by filling it with water and checking it very carefully.
Having made your checks, you should select the most suitable and desirable position for your aquarium. The position selected should have an even and level surface and should be able to support the weight of the filled aquarium. In order to prevent excessive algae growth, we recommend that you select a position that is not exposed to direct daylight.

We strongly recommend that the appropriate JUWEL Aquarium cabinet is used. They have a water-repellent surface and they have been made to match the dimensions and to bear the weight of the filled aquarium. The cabinet must be positioned on a level surface. The JUWEL Aquarium is built with a special bottom frame for security. The aquarium should be placed directly onto the cabinet. DO NOT place any additional support, e.g. polystyrene, under the aquarium since this is not necessary with our aquariums.
Weight of the aquarium in kg filled with water:
385

Suggestion: JUWEL Backgrounds

Complete the look of your aquarium by fitting one of our stunning backgrounds.

JUWEL Poster Backgrounds:
Vibrant plants or realistic rock on all double sided posters.

JUWEL Rock or Root Backgrounds:
Three dimensional Rock or Root backgrounds that give depth to the aquarium.

JUWEL Structured Backgrounds:
Subtle Bark effect that enhances the view of the aquarium.

JUWEL aquarium silicone:
The Rock, the Root and the Structured backgrounds are fitted to the inside of the aquarium using the JUWEL silicone prior to filling.

JUWEL Terrace
Attractive terrace modules matching the design of the backgrounds Rock and Root.
All backgrounds are readily available from your JUWEL retailer.

Setting up your JUWEL Aquarium

In order to set up your aquarium and to prepare it for its intended use, please follow the following guidelines.

1. Make up the appropriate JUWEL Aquarium cabinet.

2. Place the aquarium in its chosen location.

3. Ensure that the filter system is set up according to the instructions as described in this manual.

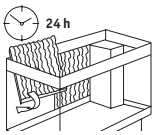
4. Place your substrate in the bottom of the aquarium and plant as desired.

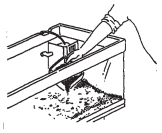
5. Fill the aquarium with room temperature water slowly through the filter to the red fill line indicated inside the aquarium - Important - do not over fill!

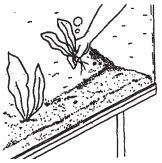
6. Connect the powerhead and heater and complete by placing the light unit and flaps on the top of the aquarium.

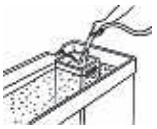
7. For tropical set-ups, allow the aquarium to reach the desired temperature prior to the addition of livestock.

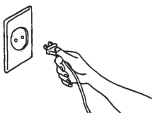
You can add a few hardy fish after only a few days since you will need some livestock to start the filter maturation process. The filter can take between 6 and 8 weeks to fully mature. Should you choose to add further livestock during this period, then this should be a gradual process.









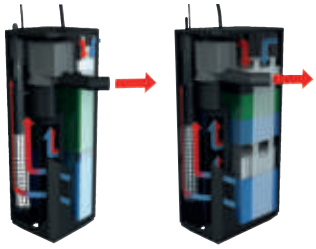


The JUWEL filter system Bioflow

The JUWEL filter system Bioflow is a highly effective biological filter system with two stages that includes components complementing each other in an ideal manner. Installing the filter in the aquarium makes hose connections unnecessary and prevents leaks. The pump output is not negatively affected by hose couplings, intake tubes etc. The capacity of the pump is designed in such a manner that an ideal level of biological filtering is ensured by a sufficient level of percolation through the filter material.

In that context, the large filter volume ensures excellent mechanical filtering and facilitates long cleaning intervals.

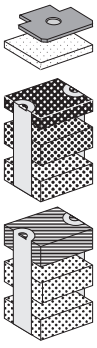
The JUWEL filter system Bioflow enables you to achieve a look in the aquarium which is characterized by almost no discernable water movement. Accordingly, the fish is exposed to less currents, and you achieve a semi-natural peaceful environment for fish and plants. The construction of the filter system enables you to quickly access the individual heater, pump, and filter media components. This way, the filter system may comfortably be operated during cleaning and while performing maintenance work.



Bioflow Super

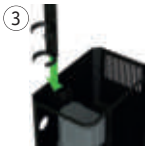
Bioflow 3.0
Bioflow 6.0
Bioflow 8.0

Filter Wool (white pad)
The white filter wool acts as a mechanical pre-filter, removing large particles of dirt and excess food which in turn ensures that the other sponges do not get clogged.
Active Carbon Sponge (black)
The black activated carbon sponge sits on top of the blue coarse filter sponges, and removes chemical impurities from the water which cannot be removed biologically.
Nitrate Removal Sponge (green)
The Sponge contains micro-organisms, which will, once developed, reside inside the sponges and in the water. These micro-organisms feed of nitrates and will reduce them significantly. The JUWEL Filtration system provides the optimum housing for these micro-organisms.
Filter Sponge Coarse (blue)
The coarse blue filter sponges allow bacteria cultures to develop quickly, cleaning the water which is now free from chemical impurities.
Filter Sponge Fine (blue)
The fine blue sponges and the bacteria cultures living in them, clean the water of even the smallest impurities.
Cirax
The highly porous filter material utilizes its extremely large surface for effective biological cleaning and ensures the highest water quality.



Bioflow 3.0
Bioflow 6.0
Bioflow 8.0

Getting Started - The JUWEL filter system Bioflow 3.0, 6.0 and 8.0



You should prepare the filter for operation prior to setting up the aquarium. However, do not connect the electrical components to the power supply yet.

Please observe the following notes regarding commissioning the JUWEL filter system Bioflow:

The JUWEL filter system consists of:

- 1 heater (included in complete aquariums only)
- 1 heater holder
- 1 pump
- 1 outlet nozzle
- 2 filter basket
- 3 sets of white filter wool, packaged
- 1 carbon sponge, packaged
- 1 green nitrate remover sponge, packaged
- 1 blue filter sponge "rough"
- 1 Cirax filter medium, packaged
- 2 blue filter sponges "fine"

Bioflow 3.0
Bioflow 6.0
Bioflow 8.0

1. Insert the base of the pump into the pump holder of the filter and firmly push it into position. In that context, the pump outlet faces in the direction of the outlet opening.

Confirm the proper arrangement of the gasket in the outlet opening (it is used to minimize the transmission of vibrations).

2. Carefully attach the outlet nozzle from the outside through the opening to the pump outlet and ensure its firm connection.

3. Insert the heater holder into the guide rail of the filter separation wall.

4. Insert the heater from above into the heater holder.

5. Now start preparing the filter sponges by removing the plastic packaging from the carbon sponge and the nitrate remover sponge and the Cirax filter medium. Thoroughly rinse the blue filter sponges only under running water.

6. After this, insert the blue "fine" filter sponges and the Cirax filter medium into the lower filter basket. Following that, place the blue "rough" filter sponge, the green nitrate remover sponge, the carbon sponge, and filter wool in the top position into the upper filter basket and push both filter baskets into the filter housing.

7. Place the filter cover on the filter housing.

8. The JUWEL filter system Bioflow is now ready for operation.

The JUWEL Aquarium Filter System is a biological filter system. For it to work effectively, bacteria cultures will need to grow inside the blue sponges. This process can take up 6-8 weeks for the filter to fully mature. Consequently we recommend to decorate and plant the aquarium and add just a few (3-5) hardy fish in order to help the maturation process. Please test the water on a weekly basis to monitor the water conditions and once the water is safe you can begin to add more fish.

Recommendation

JUWEL Air Diffuser
The special JUWEL Aquarium Air Diffuser provides additional oxygen to the aquarium if desired. This can be ordered from your JUWEL Aquarium retailer (Part No. 85145).

Care and maintenance of the JUWEL Filter System

The JUWEL Filter System requires very little maintenance if you follow the following instructions.

- Replace the white filter wool pad once a week. If you have large fish, then this may require changing slightly more frequently. This will ensure that the filter sponges will not be clogged by larger dirt particles.

- Replace the black activated carbon sponge every 4-6 weeks. Again, if you have large fish then this may be to be more frequent. This ensures that any chemical impurities from the water will be removed. Please note that the chemicals which are absorbed by the activated carbon contained in the sponge, will be released to the water again if the change intervals are too long.

- If the filter wool and the activated carbon sponge are replaced as suggested, then it is sufficient to carefully clean or replace the coarse blue sponges at 6-12 weeks and the fine blue sponges at 3-6 months only.

- Cleaning or replacing the blue sponges or the Cirax filter medium affects the impact of the bacterial culture. For that reason, it is recommended not to clean or replace the blue sponges and the Cirax filter medium at the same time, but rather successively in an alternating manner.

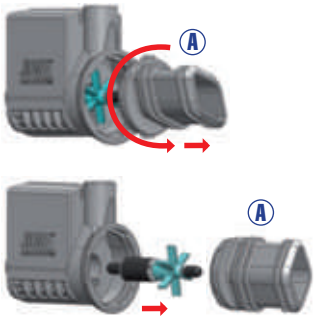
You do not need to worry about the liquid dirt accumulating at the bottom of the filter housing. Normally, this dirt contains important biological substances which enhance the water quality.

Please do not worry if some dirt gets into the water during the cleaning process causing cloudiness. After the filter system is back in operation, the water will soon clear again.

- In order to allow a proper level of micro-organisms in the filtration system it is recommended to exchange the sponge every 6 weeks. The nitrate removal sponge contains bacteria, which will after a while reduce the nitrate level in the aquarium significantly.

⚠ **Important:**
Always use original JUWEL Aquarium filter media to ensure the optimum performance of your system.

Maintenance of the pump JUWEL Eccoflow in the filter system Bioflow 3.0, 6.0, 8.0



The pump JUWEL Eccoflow should be checked with regard to functionality and cleaned at regular intervals (at least once a month).

Please proceed as follows to that end:

1. Disconnect all electrical devices of the aquarium from the power grid.
2. Remove the outlet nozzles.
3. Remove the pump from the separation wall of the filter.
4. Disconnect the adapter (A) from the motor by turning it counter-clockwise and remove the impeller.
5. Thoroughly clean all components. It is particularly necessary to remove the impeller from the chamber and remove deposits and dirt from the chamber itself as well as the impeller. The function of the pump will be impaired otherwise. Also check the impeller for damage and possible signs of wear of the magnet.

After that, please reinstall the pump in reverse order in the filter.

⚠ **Recommendation:**
In order to ensure that the power head operates at its optimum and maintains its low noise level, we recommend to check and potentially replace the parts subject to wear and tear, such as the impeller and the adapter.

All spare parts are available from your local JUWEL Aquarium retailer.

⚠ **Safety instructions:**
Never operate the power head out of water.

Always unplug the power head from the power supply before removing it from the filter.

The power head is intended for indoor use and for use in fluids up to 35°C.

Never repair the electrical cord or plug. In case of damage replace the complete power head.

Installing the heater in the JUWEL filter system

The JUWEL aquarium heater is supplied with the heater holder (fig. 1) which you will need for the installation.

Please perform the following steps for all JUWEL Aquarium filter systems:

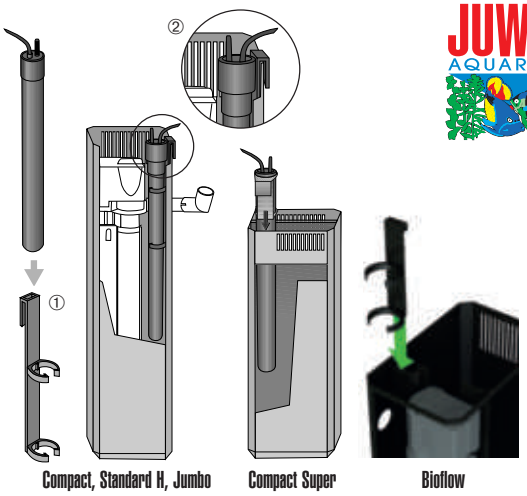
(You may need to start by removing an installed separation wall holder.)

1. Install the heater holder.

2. Attach the heater to the filter housing on the inside of the filter and/or initially insert the heater holder into the guide rail of the separation wall.

The heater is properly positioned if the heater holder rests on the upper edge of the housing and/or the separation wall.

The heater is now operational.



Recommendation:
The JUWEL automatic heater warms the water of your aquarium up to 28°C depending on a nomal room temperature of 21°C. If you keep your aquarium in rooms below this or your fish need a higher temperature, we recommend to purchase a second heater.

Safety instructions:
Only connect the heater once the aquarium is filled with water at least to the minimum water level of the heater.

Never use the heater outside the aquarium.

Operate the heater indoors only.

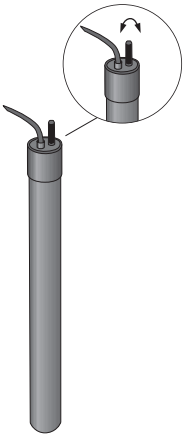
Operation of the heater

The JUWEL Aquarium heater has an adjuster on the top to allow individual adjustment of the temperature to suit your own requirements.

In order to set the heater, turn the adjuster until the temperature indicator corresponds to the required temperature value.

It can take up to twelve hours for the water to reach the desired temperature depending on your ambient room temperature. Thereafter the heater will maintain the desired temperature automatically clicking on and off as required. When the heater is heating a small red light can be seen from the top of the filter box.

We recommend that you check your water temperature with a separate thermometer. Please check your heater frequently for any signs of damage and replace immediately if any are discovered. No other maintenance of the heater is required.



Recommendation

JUWEL Digital Thermometer
To monitor the temperature we recommend the JUWEL Digital Thermometer (Part No. 85701). Available from your JUWEL Aquarium retailer.

Safety instructions:
Always unplug the heater and allow it to cool before removing it from the filter.

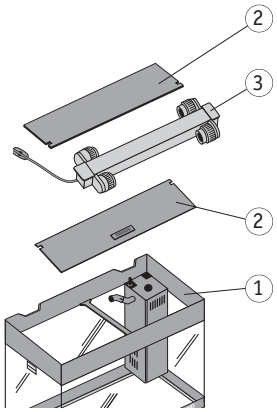
Never attempt to open or repair the heater. Any signs of damage or malfunction and the heater should be replaced with an original JUWEL Aquarium heater.

Never repair the electrical cord or plug. In case of damage replace the complete heater.

Once removed never place on a flammable surface.

This appliance is not intended for use by young children or infirm persons unless they have been adequately supervised by a responsible person to ensure that they can use the appliance safely. Young children should be supervised to ensure that they do not play with the appliance.

Lighting for the JUWEL Aquarium



Your JUWEL aquarium includes the lighting system "Multilux" High-Lite.

The JUWEL High-Lite lighting system represents T5 technology by JUWEL Aquarium and - compared to the conventional lighting standard - provides you with 150% more light in the aquarium.

In that context, JUWEL Aquarium takes one vital step more than any other manufacturer with its system High-Lite, in particular it achieves optimum illumination of the aquarium by means of fluorescent tubes of a suitable length.

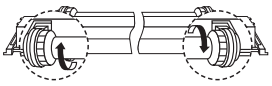
The light system itself is waterproof and consequently allows you to maintain the aquarium

while it is fully lit.

The "Multilux" High-Lite light system by JUWEL Aquarium consists of

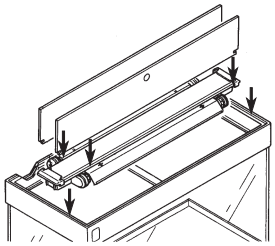
- top frame (1)
- cover lids (2) with an integrated holder for the JUWEL automatic feeder
- light unit with two or four tubes (3)

Installation of the "Multilux" Lighting System



The water tightness can only be guaranteed if the tube holders have been firmly connected to their sockets. We recommend that you check this prior to connecting the lighting unit to the power supply.

The light unit can now be placed onto the top frame and can be connected to the power supply. Having done this please fit the flaps to close the aquarium completely.



Notice:
The JUWEL fluorescent tubes High-Lite in T5 technology complement the electronic components in the JUWEL High-Lite light units. For that reason, only use these fluorescent tubes as original JUWEL Aquarium spare part.

Recommendation:

JUWEL Reflectors
We recommend the use of suitable JUWEL reflectors that you may purchase from retailers in order to improve the luminosity.

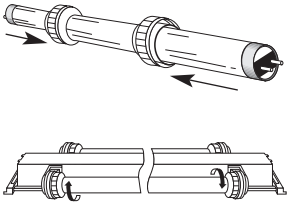
These increase the luminosity by 100% and consequently ensure a further improvement of the conditions within your aquarium.

Tip:

JUWEL automatic feeder
We offer you the JUWEL automatic feeder matching all JUWEL aquariums.

It is available from specialist retailers as original JUWEL Aquarium accessory (item No. 89000).

Care and Maintenance



The JUWEL Aquarium Multilux light system requires little care and maintenance. Clean the frames using a soft towel and warm water only.

Changing the Tubes:

Please note that tubes should always be replaced in pairs and the tube holders should also be replaced as they contain the vital seals that guarantee water tightness.

Please follow the following steps to replace your tubes:

- Disconnect the hood system from the power supply - just switching off is not enough - and unscrew the tube holders and move them to the centre of the tube.
- Remove the tube by pulling it gently towards you.
- Place the new tube holders on the new tube.
- Position the pins on the tubes in line with the slots on the tube holders, push the tube in until it clicks and tighten the new tube holders firmly to ensure a water tight seal.
- Place the light unit back on the aquarium and reconnect to the power supply and switch on.

Safety instructions:
Always disconnect the light system from the power supply before changing the tubes.

Never repair the electrical cord or plug. In case of damage replace the complete light system.

Recommendation:

JUWEL End Caps
To ensure the water tightness of your Multilux light system always use genuine JUWEL Aquarium spare parts.

Please note the tube holders are available from your JUWEL Aquarium retailer.

In the event of a problem the Multilux light system will automatically switch off.

If after replacing both light tubes the unit still fails to work then the unit itself will need replacing. Please see your aquarium passport for details of which unit you require or consult your JUWEL Aquarium retailer.

Safety instructions:
Never use the light system under water.

Never attempt to open the light unit or repair it. This is dangerous and will invalidate your warranty.

Hint:

JUWEL Fluorescent Tubes "High-Lite"
The fluorescent tubes High-Lite in T5 technology are available as original JUWEL Aquarium spare parts in various light colours.

High-Lite "Day" - Bright, vivid light with a natural colour effect that stimulates the growth of plants in the aquarium.

High-Lite "Nature" - Warm, natural light which also stimulates plant growth.

High-Lite "Colour" - Dramatically boosts the natural colours. Shades of red and blue are emphasized in particular.

High-Lite "Marine" - Bright white light for a natural reproduction of colours in saltwater aquariums.

High-Lite "Blue" - Actinic blue light which supports the growth of corals in saltwater aquariums.

Ask your dealer about them.

Proper disposal (electrical waste)
The labelling on the product or on the accompanying literature declares that it must not be disposed of, at the end of its service life, together with household rubbish. Please dispose of this equipment separately from other waste, to protect the environment or public health from damage by unregulated waste disposal. Recycle the equipment and support the sustained recycling of material resources.

Private users should contact the dealer who sold them the product or the responsible authorities, for a demonstration on how to recycle the equipment in an environmentally friendly way.

Guarantee

We guarantee the performance of the JUWEL-Aquarium product or its accessories to the purchaser for a period of 24 months from the date of purchase according to the following conditions:

§ 1 Extent of the guarantee

(1) This guarantee extends to the JUWEL-Aquarium product and its components excluding items subject to wear and tear such as light tubes and filter media. It is limited to the product as such and does not cover damage to other property and/or individuals. In addition, the provisions of the product liability law apply. These provisions are not limited by the aforementioned arrangement.

(2) It is the prerogative of JUWEL-Aquarium to decide whether the guarantee is performed by means of repair or replacement. If neither repair nor replacement can ensure the performance of the JUWEL-Aquarium product the purchaser is entitled to demand a reduction in price or to return the product against repayment of the purchase price.

§ 2 Guarantee period and settlement procedure

(1) The guarantee period begins on the day of the purchase of the product from the retailer. Claims under this guarantee will not be honoured, if

(a) the damage is caused as a result of improper use or maintenance or non-observance of the instructions given in this manual

(b) the product or its components have been maintained by persons or companies not authorised by the manufacturer to do so

(c) the product or its components have been damaged by mechanical means of whatsoever kind, in particular broken glass

(2) All claims under this guarantee have to be notified to the retailer, from whom the aquarium has been purchased without delay, however, not longer than 2 weeks from the day of first occurrence of defects. Rights under the consumer protection laws will remain unaffected.

(3) Guarantee claims will only be accepted if the validity of the claim is supported by evidence of purchase of the JUWEL-Aquarium product.

This declaration of guarantee is a translation only. In case of doubts the original German language version prevails.

We reserve the right to make technical alterations.

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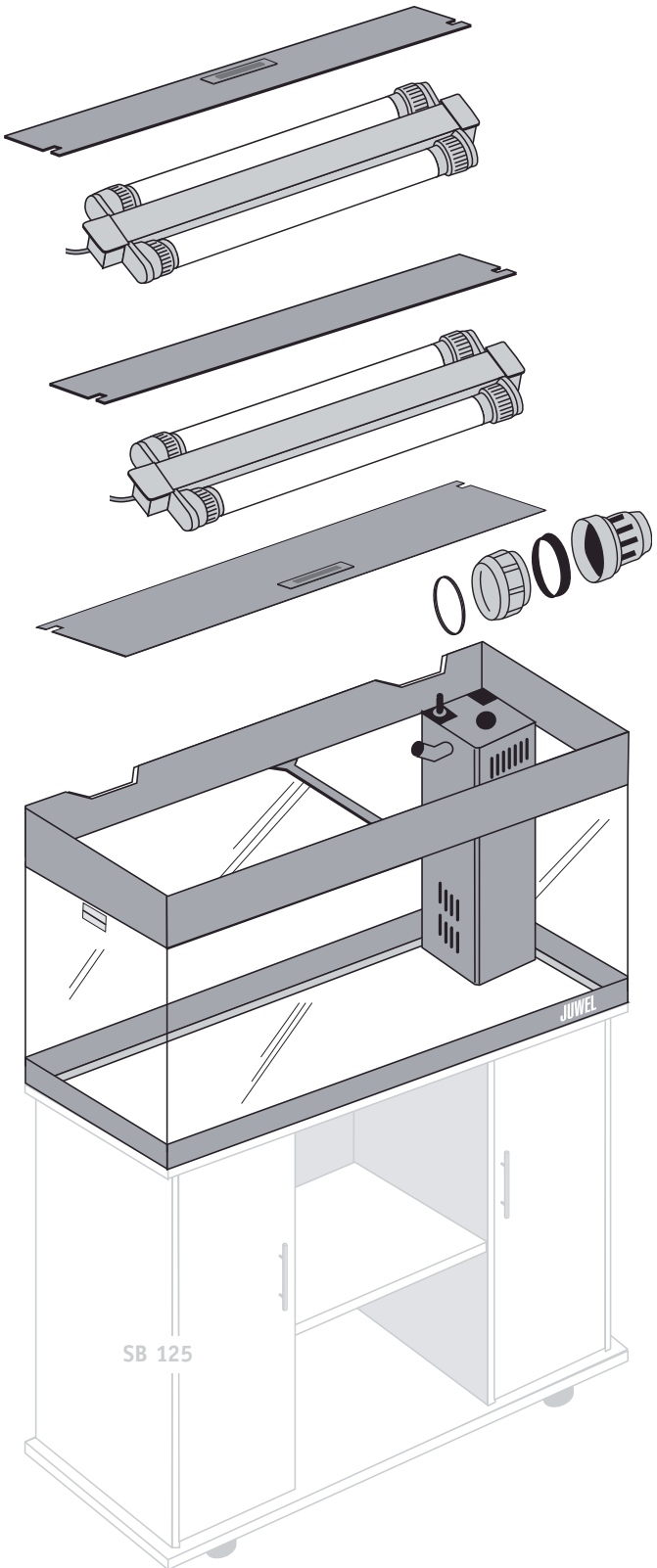
® JUWEL, Trigon, Vision, Rekord, Rio, Lido, Vio, Korall, Monolux, Duolux, Multilux, Korallux, Violux, High-Lite, Warm-Lite, Colour-Lite, Day-Lite, Juwel Twin-Lite, Juwel Eccoflow, Bioflow, Cirax, Nitrax.

Aquarien-Pass
RIO 300 - MULTILUX



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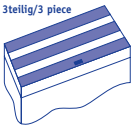	93985
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	86354 High-Lite Day
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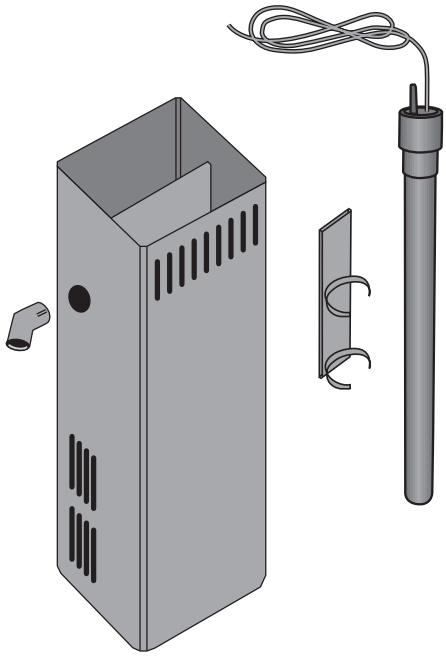
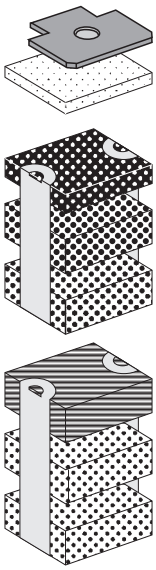
JUWEL FILTER SYSTEM Bioflow 6.0_JUWEL Eccoflow





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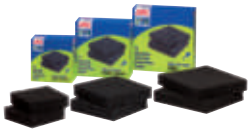
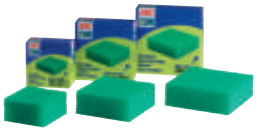
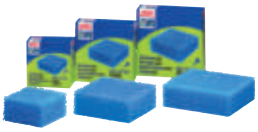
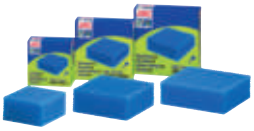
	88109
	88105
	88100
	88101
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